



The first flight, last summer, of the Bristol 171 helicopter marked an important stage in the company's and country's progress with rotating wing aircraft. Alvis Leonides helicopter power plants (right) are to be installed in later machines.

Foundations for '48

information, in conjunction with a Ghost Vampire, for the D.H.106. A third test bed, again with its two inboard Merlins retained and those outboard exchanged, is the Theseus Lincoln. Figures and experience with this machine will provide data for not only Theseus installations but for the larger Proteus airscrew turbines which are to power production Bristol 167s following the Brabazon I. First stage in building the 3,500 h.p. Proteus was the design of the experimental pure jet Phoebus.

News is expected very soon of the first flight of Armstrong Siddeley Pythons installed outboard in a Lancaster. These powerful contra-prop units have undergone a year of intensive development.

Smaller airscrew turbines are tested by installing them in the nose of a four-engined aircraft and so introducing a five-engined class. So far the Armstrong Siddeley Mamba and Rolls-Royce Dart have commenced their flight testing in this manner. Later, the only new airscrew turbine of the year, the 1,500 h.p. Napier Naiad, will probably fly in such a five-engined arrangement.

For the Metrovick it has been a most important year,

if only because a pair of F.2/49 flew for the first time as primary power units of the unique new Saunders-Roe fighter boat. Other units are being tested in a Meteor and in a Lancaster II in which the rear turret has been replaced by the jet unit.

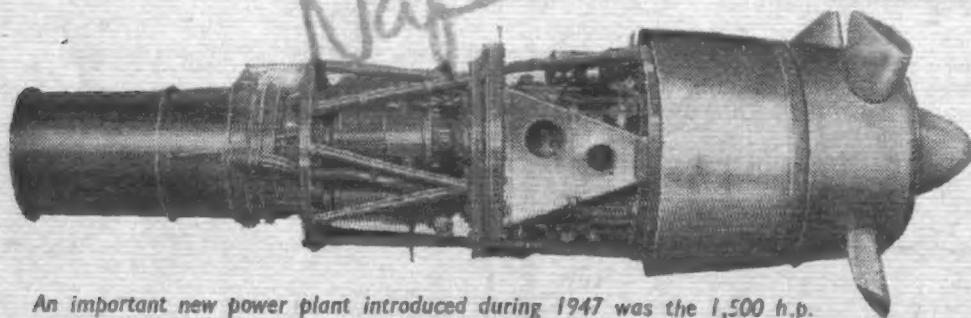
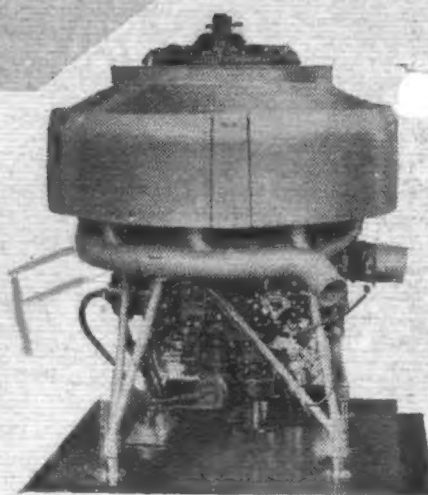
Pure jet Goblins I and II, Derwent Vs and Nenes have continued to give good service in their respective squadron and prototype military aircraft. In addition to improvement in reliability considerable increase in power output has been achieved experimentally from these engines.

Piston engines, particularly the larger civil power plants, have continued to hold their important position in spite of jet intervention. Merlin 620 power plants have given good service in D.C.4Ms on the North Atlantic route, and a civil Griffon unit is under development. Hercules and Centaurus units have also operated extensively in commercial transports. The latest series of these civil Bristol power plants are the Hercules 730, 750 and 760, and Centaurus 630.

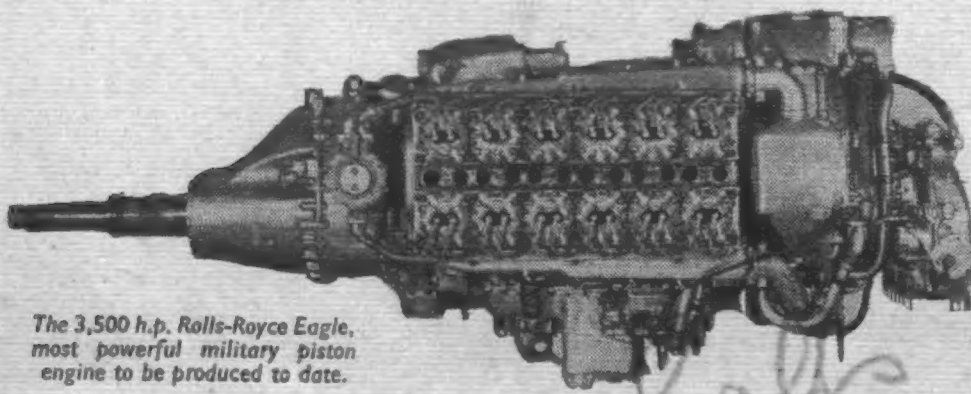
An important and powerful new military unit, the 3,500 h.p. Rolls-Royce Eagle, with 24 cylinders sleeve valves, flew for the first time the Wyvern strike fighter.

Alvis Leonides engines have put in a number of flying hours and a unit adapted during the year as a helicopter power plant shows promise for installation in the Bristol and Westland-Sikorsky machines. Development of the latest Gipsy Queen and Major Series engines has continued, and many installations are now in view for the various normally aspirated and supercharged marks. The geared and supercharged 345 h.p. Queen 70 has been particularly prominent.

It should not be long before the Bombardier, first of a new Blackburn Series, is ready to commence flight development prior to augmenting the ubiquitous current Cirrus Minor IIs and Major IIIs. Development work continues on the Jameson and Monaca engines, both flat four designs of about 100 h.p. output.



An important new power plant introduced during 1947 was the 1,500 h.p. Napier Naiad airscrew turbine. The Company have other new engines under development.



The 3,500 h.p. Rolls-Royce Eagle, most powerful military piston engine to be produced to date.